

CARBON MONOXIDE IS PRODUCED BY THE INCOMPLETE COMBUSTION DUE TO INSUFFICIENT OXYGEN LEVELS IN THE AMBIENT AIR. WHEN INHALED, IT RAPIDLY BINDS TO HEMOGLOBIN - THE PROTEIN PIGMENT IN THE RED BLOOD CELLS THAT CARRIES THE OXYGEN TO ALL ORGANS AND TISSUES OF OUR BODY, AND, THUS, PREVENTS HEMOGLOBIN FROM BINDING TO THE OXYGEN. DUE TO THAT, HIGH CONCENTRATIONS OF CARBON MONOXIDE CAN CAUSE SEVERE DAMAGES TO THE TISSUE AND ORGANS OR EVEN RESULT IN DEATH.

YOU CANNOT SMELL CARBON MONOXIDE, BUT, AT HIGH LEVELS, IT CAN HAVE DEADLY EFFECTS ON PEOPLE IN A MATTER OF MINUTES.

CARBON MONOXIDE IS PRODUCED BY HOUSEHOLD HEATING DEVICES (SUCH AS NATURAL GAS-SPACE HEATERS, COAL OR WOOD-BURNING STOVES) AND DIESEL GENERATORS. WHEN THOSE APPLIANCES ARE INSTALLED AND MAINTAINED PROPERLY, AND WORK CORRECTLY, THE AMOUNT OF CARBON MONOXIDE PRODUCED CANNOT BE HAZARDOUS. HOWEVER, IF APPLIANCES DO NOT WORK PROPERLY OR ARE USED AND MAINTAINED INCORRECTLY, AN UNCONTROLLED RELEASE OF CARBON MONOXIDE WITH SEVERE HEALTH CONSEQUENCES CAN RESULT. CARBON MONOXIDE POISONING CONTRIBUTES TO HIGH DEATH RATES AMONG PEOPLE WORKING IN CLOSED AND INADEQUATELY VENTILATED GARAGES AND WORKSHOPS WITH CAR ENGINES RUNNING INSIDE.

CHILDREN, ELDERLY PEOPLE AND PEOPLE SUFFERING FROM CARDIOVASCULAR AND RESPIRATORY DISEASES ARE THE POPULATION GROUPS PARTICULARLY VULNERABLE TO THIS TYPE OF POISONING.

NATIONAL POISON CONTROL CENTER



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CARBON MONOXIDE
POISONING
PREVENTION AND THE
FIRST AID



SYMPTOMS OF POISONING

Mild CO poisoning: headache, shortness of breath and nausea. Severe CO poisoning: severe headache, dizziness, behavioral disorders up to the impaired consciousness. Patients are pale and feel bad. In chronically ill patients, severe poisoning may cause severe complications that can even be fatal. Since the early symptoms of carbon monoxide poisoning are often very similar to the symptoms of the flu and cold, it can so easily be confused with the cold or flu what might be a life-threatening mistake.

THE FIRST AID MEASURES

If acute carbon monoxide poisoning is suspected, the following measures should be taken:

1. Ensure that a poisoned person get enough fresh air, open windows and doors, turn off household heating devices and leave the house immediately!

2. Call the Emergency Service by dialing 194 and a toxicologist on duty at the NPCC Toxicology-Information Department at +381 11 3608 440, and inform them that you suspect carbon monoxide poisoning in your house or in your neighbourhood.

The management of poisoning in a timely manner reduces the risk of its severe consequences to a greater extent. Do not ignore the above-mentioned symptoms, particularly if more people in your neighbourhood have experienced them. This type of poisoning so often causes the loss of consciousness, injuries, and may even have a fatal outcome.

NECESSARY DATA

When you talk with a physician, be ready to answer the following questions:

- A) Do symptoms occur only inside your house –in a closed room?
- B) Do the symptoms decrease or go away after going out of the room and getting fresh air ?
- C) Does anyone in your surrounding complains of having similar symptoms?
- D) Have those symptoms occurred at the same time?
- E) Do you use heating appliances that burn wood, oil, or coal, benzene motors, aggregates and similar device in your home?
- F) Have you serviced the above-mentioned devices lately?
- G) Are you certain that all those devices are properly used?

CARBON MONOXIDE DETECTORS

Besides the proper installment, maintenance, checks and use of the above-mentioned household appliances and devices, a properly installed carbon monoxide detector may greatly contribute to the prevention of carbon monoxide poisoning. Those devices are expensive, but easy to use and might help prevent severe consequences of this common poisoning type.

PREVENTION

Prevention is the best way to prevent carbon monoxide poisoning

- All your heating appliances that use wood, coal, oil, kerosene or gas are to be serviced by a professional installer at least once a year. The best time to do that is at the beginning of the heating season.
- Ensure that all your chimneys and stove pipes are inspected, and kept clean and free of any obstruction to enable good gas exhaustion.
- All heating devices should have exhaust outlet pipes directed towards the outside the house. They are to be installed and inspected according to the manufacturer's recommendations by a qualified, licensed person.
- Read all the instructions for use and servicing that accompany those appliances.
- Use fuels intended for such use only, and keep the doors in your house open.
- Keep at least one window open to maintain the air supply sufficient to keep the appliance burning cleanly.
- Never idle the car in your garage, even with the garage door open because the exhaust gases may build-up inside the garage.
- Never use a gas-burning stove as a space heater for even a shorter period of time.
- Never use a charcoal grill indoors, even in a fireplace.
- Don't ever sleep in a room with a non-vented gas or kerosene space heater.

Devices that use benzene (such as lawn mowers, string trimmers, chainsaws, small engines, generators, etc) are not for the indoor use.

